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January 30, 2006 HAND CARRIED

Angela Reynolds, Environmental Planning Officer
City of Long Beach
Dept. of Planning & Building
333 Ocean, 7th Floor
Long Beach, CA 90802

Re: Long Beach Airport DEIR Comments

Dear Ms. Reynolds,

California Earth Corps appreciates this opportunity to comment on the DEIR for the Long Beach Airport Terminal Improvement Project. Our concerns are focused on the air quality impacts of Long Beach Airport operations on nearby residents, airport personnel, and the traveling public. The DEIR fails to understand the nature and severity of the Health Risk from currant operations and cannot therefore construct an accurate baseline of exposure. Without acceptable data on current emissions and background, there is no way to project impacts from the Project with sufficient confidence to form the basis for Decision to Approve the Project.

Why were no actual measurements of airborne toxicants taken at the Airport?

Emission factors based upon aircraft engine manufacturers' specifications derived from test stand measurements of brand new engines highly tuned for peak performance do not reflect actual emissions from the aircraft using LGB today, nor was there any indication we could find that manufacturers' data from the A320 engines, the predominant aircraft using LGB, were used. The most significant risk, that from ultrafine particulates <2.5 microns, are not included or considered at all. Emissions vary substantially with the quality of the fuel as well as the performance of the engine, determining factors unavailable for actual emissions at LGB. Without accurate emission data, modeling is hopelessly skewed and any determination of Health Risk with any certainty impossible for responsible decision making or even to suggest what measures could be taken to reduce or mitigate public health risks.

Use was made of a single AQMD sampling station miles away and located to collect a pool of diesel exhaust particulates from the Ports and I710 freeway on filter paper changed daily and periodically analyzed. Since filters allow particles less than pore size to pass through, all ultrafines that pose the greatest health risk, even those up to 2.5 microns, are uncollected and their impacts not included. No methodology was included as to how the fraction due to airport operations was differentiated from ships, trucks and trains. Because aircraft emissions are highly episodic, and fluky wind currents and eddies can cause concentrations to vary by orders of magnitude from minute to minute and because many health impacts, like acute asthma episodes, are triggered by high concentrations in a single breath, multiple monitoring (real time, continuous readout) stations with meteorology are required to determine health risk.

Why were airborne toxicants "of concern" not measured, analyzed or included?

Non carbon particulates contaminated with metals and other toxicants have long been known to be present on LGB runways and loading zones, as at most airports. Jet engines are not only a source themselves, they are giant leaf blowers that entrain this dust into the air column; the vortices from aircraft wing tips can concentrate and lift these dusts, both fine and ultrafine, high in the air, with a fallout plume measurable for miles downwind in ground samples using airport "markers" to differentiate from other sources.

Why was accurate meteorological data not collected and used?

As any Long Beach sailor will attest, coastal winds are highly variable. Urban structures greatly increase shifting winds; passing trucks, cars and especially aero planes cause not only speed and direction to shift from minute to minute, but temperature and barometric pressure as well. Vortex from airliner wingtips can be strong enough to flip small planes; a well known safety hazard when mixing general aviation and commercial aircraft. Airport weather data collected hourly from a single site is an unacceptable error source; that is why a full meteorology complement must be included with each monitoring station, with accurate clock to correlate data, hopefully barometer, thermometer, even a db meter, as well as the requisite real time nox, tox, sox, and particulate instrumentation. "The refined planemetric boundary characterization capabilities of AEROMOD are negated by the crude meteorological data chosen by the DEIR preparer" (Sears)

Cost is not an answer

California Earth Corps has been monitoring stationary source emissions for fifteen years; our data and methodology, used in regulatory and court proceedings, has never been successfully challenged. We have recently partnered with HUSH2, a community based organization concerned with direct impacts of LGB operations on neighborhood health and well being, in multistation, multivariate monitoring of LGB particulate emissions from late September, 2005 until mid January of this year. The study of those data and projected Health Risk are still underway and will be widely shared upon completion, but the preliminary Summary (attached) and data show concentrations of particulates in neighborhoods in the vicinity of the LGB Airport are orders of magnitude higher than that used by the DEIR to form the basis of the entire Air Quality analysis. And at a cost orders of magnitude less than the million dollar cost of the DEIR. To base an EIR on flawed methodology, unwarranted assumptions and unreliable data compromised by inadequate meteorological data is misleading at best, and a waste of time and money.

Why was the outmoded Version 4.3 of EDMS/AEROMOD used?

The outdated beta-testing version of AEROMOD is particularly vulnerable to the meteorological inaccuracies induced by using Airport met data. That, in part, is why the Federal Aviation Administration has withdrawn EDMS from the guideline on Air Quality Models, Appendix A. Failure to follow the most recent revisions, or to fully evaluate those consequences, could lead to increased scrutiny by FAA and exercise of their option to challenge the Noise Ordinance and the flight limitations. Conversely, meticulous adherence to FAA suggested guidelines may enhance the security of the Ordinance and open the way for adoption of a "pollution bucket" or no net increase in LGB emissions of toxicants, esp. particulates, to a non attainment area, as suggested by the Clean Air Act.

This past year has seen a sharp increase in public and regulatory concern about the health and climate impacts of air traffic and jet engine emissions. Both the Kyoto and recent Montreal convention has identified increased air traffic and jet exhausts as a major contributor to global warming. Recent medical findings increasingly identify particulates, especially ultrafines, and most alarming, aromatics associated with jet engine exhaust, as **the** major **cause** of COPD and asthma related diseases, the 3rd largest cause of death in the south coast airshed. They are also a major contributor to heart attack, #1, and stroke, #2. While most attention is directed at shipboard large scale diesel engines and older trucks and trains, jet engines are of increasing concern, as are the difficulties in measuring, monitoring and understanding their emissions and their impacts on air travelers, airport workers, nearby residents and sensitive receptors, all who suffer chronic exposure and insult. That is why CARB held a series of hearings and seminars last year on this topic and plans more this year. We must understand where and how these toxicants originate before we can control and reduce the emissions. Goods Movement and Ports is a hot issue; "no net increase" in emissions is becoming a preferred strategy; recognition of the health costs borne by the taxpayers as well as the personal tragedy of those struck down is becoming widely recognized. As with the Port of Long Beach and 710 freeway, LGB is becoming recognized as a serious insult and threat to public health. That is why is DEIR must be withdrawn, and proper air quality monitoring conducted sufficient to provide reliable data for the proper model to form the basis of a credible Health Risk Assessment as required by CEQA and sorely needed for informed Decision by City and an informed public.

We ask that this DEIR be withdrawn and not reissued until a credible Health Risk Assessment has been prepared and peer reviewed.

Thank you for your consideration.

Sincerely,

Don May, President
California Earth Corps

Attached:

Declarations of

Camille Sears
Eric Winegar